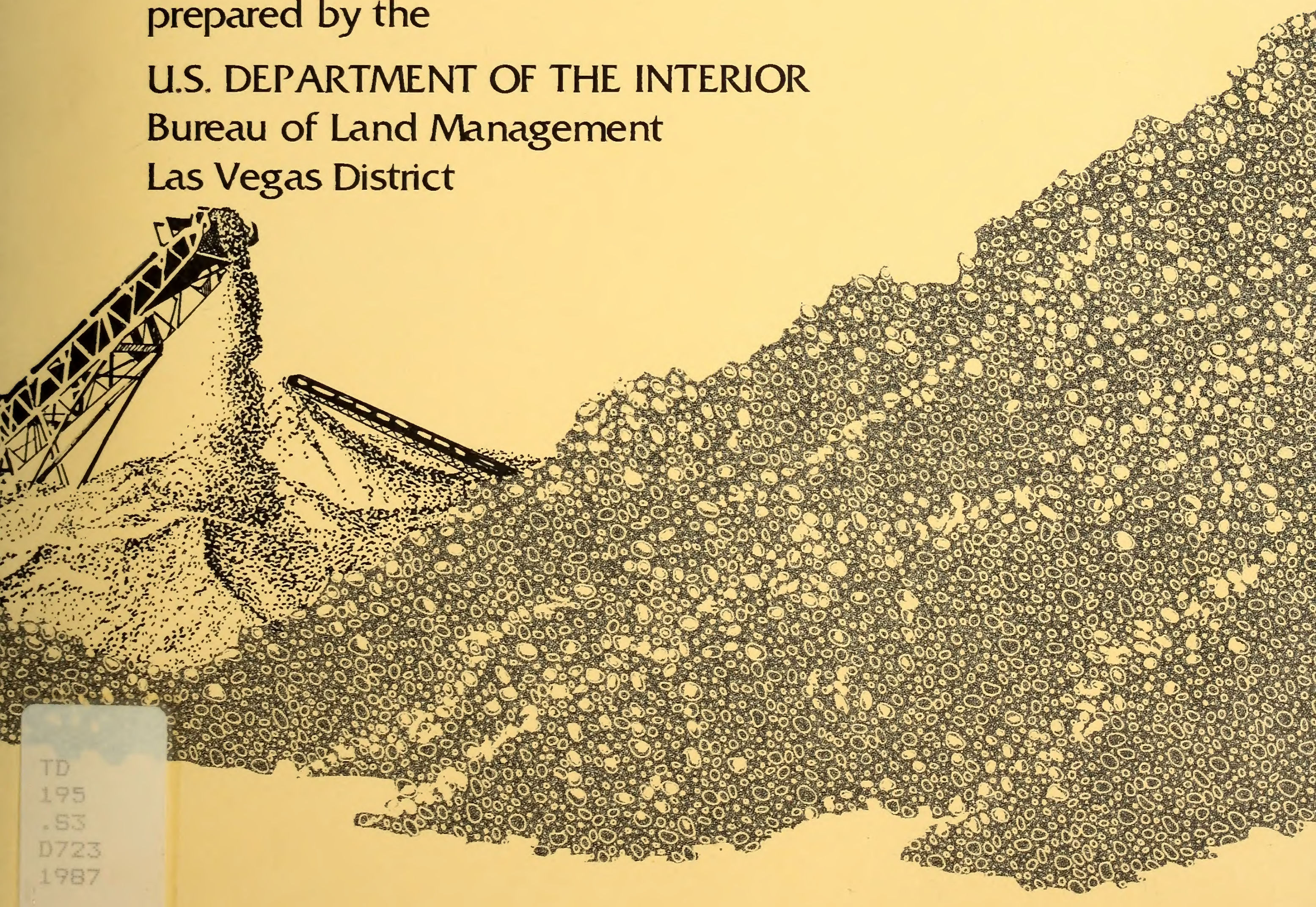
DRAFT
PLAN AMENDMENT and ENVIRONMENTAL ASSESSMENT for the CLARK COUNTY MANAGEMENT FRAMEWORK PLAN

SAND AND GRAVEL LEASING IN THE LAS VEGAS VALLEY SUB-UNIT

STATELINE RESOURCE AREA, NEVADA

prepared by the

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Las Vegas District



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Edward F. Spang
Nevada State Director

The draft Plan Amendment and Environmental Assessment considers new lease applications filed prior to the revocation of 43 CFR 3563.2 and renewal of existing leases for sand and gravel on lands within the boundaries of the Las Vegas Valley Sub-Unit in Clark County.

July 16, 1987

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INTRODUCTION

Purpose and Need

The purpose of this plan amendment is to consider the authorization of two sand and gravel lease applications in addition to the renewal of two existing sand and gravel leases in the Las Vegas Valley Sub-Unit (see Figure 1). The surface is privately owned while the mineral estate rests with the U.S. Government. Lease application approval and the renewal of the existing leases will conflict with and/or preclude surface development. Failure to renew the existing leases will put a major sand and gravel producer out of business. Denial of the lease applications will simply limit the amount of reserves available to the two aggregate companies involved. Hence, the issues to be analyzed will be primarily socio-economic in nature rather than biologic.

The Clark County Management Framework Plan (MFP), dated 1984, states that no new leases, material contracts and free use permits be authorized or existing leases be renewed on lands within the Las Vegas Valley. The principal driving force behind this decision was the fact that land patterns (public v. private land) and suburban expansion in the Valley made it next to impossible to meet industry demand for exclusive mining sites. Since the initial MFP decision in 1984, significant residential and industrial development has continued with additional major development activities in the planning stage in several of the areas in close proximity to Bonanza's existing leases as well as the lease application area. In an effort to resolve this situation, the MFP stated that not less than four community pits should be established in the Las Vegas Valley area to meet local demand for aggregate. While at the time and in theory, this was a viable solution, conditions and the wisdom which formulated the decision changed. The proposed community pit sites have since been eliminated by continued suburban growth and changing land patterns. It is now doubtful whether the community pit scenario will ever materialize. Furthermore, it has been realized the community pit concept, while suitable for small scale, low volume (less than 300,000 tons) and intermittent operations, is not compatible with large scale operations such as Bonanza Materials whose current production exceeds 1 million tons per year. Large scale operations, which involve significant capital investment in the form of equipment, employees and permanent structures, require exclusive rights, a concept community pits do not convey. Also, large volume sales (over 200,000 cubic yards or the equivalent weight of 300,000 tons) by regulation (43 CFR 3610.2) must be by competitive bid. This regulatory provision does not mesh with the community pit non-exclusive rights provision as competitive sales necessitate exclusive rights in addition to the fact that competitive contracts are generally long term (up to ten years). Community pit contracts are generally not authorized for periods longer than 1 year. Short form sales are the most common method of disposal and are authorized for only 3 months. As can be inferred from the preceding paragraph, the present MFP decision is considered unrealistic, outdated and impractical for large scale mining operations. Bound by its restrictive nature and partially inoperable community pit scheme, the Las Vegas District cannot meet the user needs of the aggregate industry.

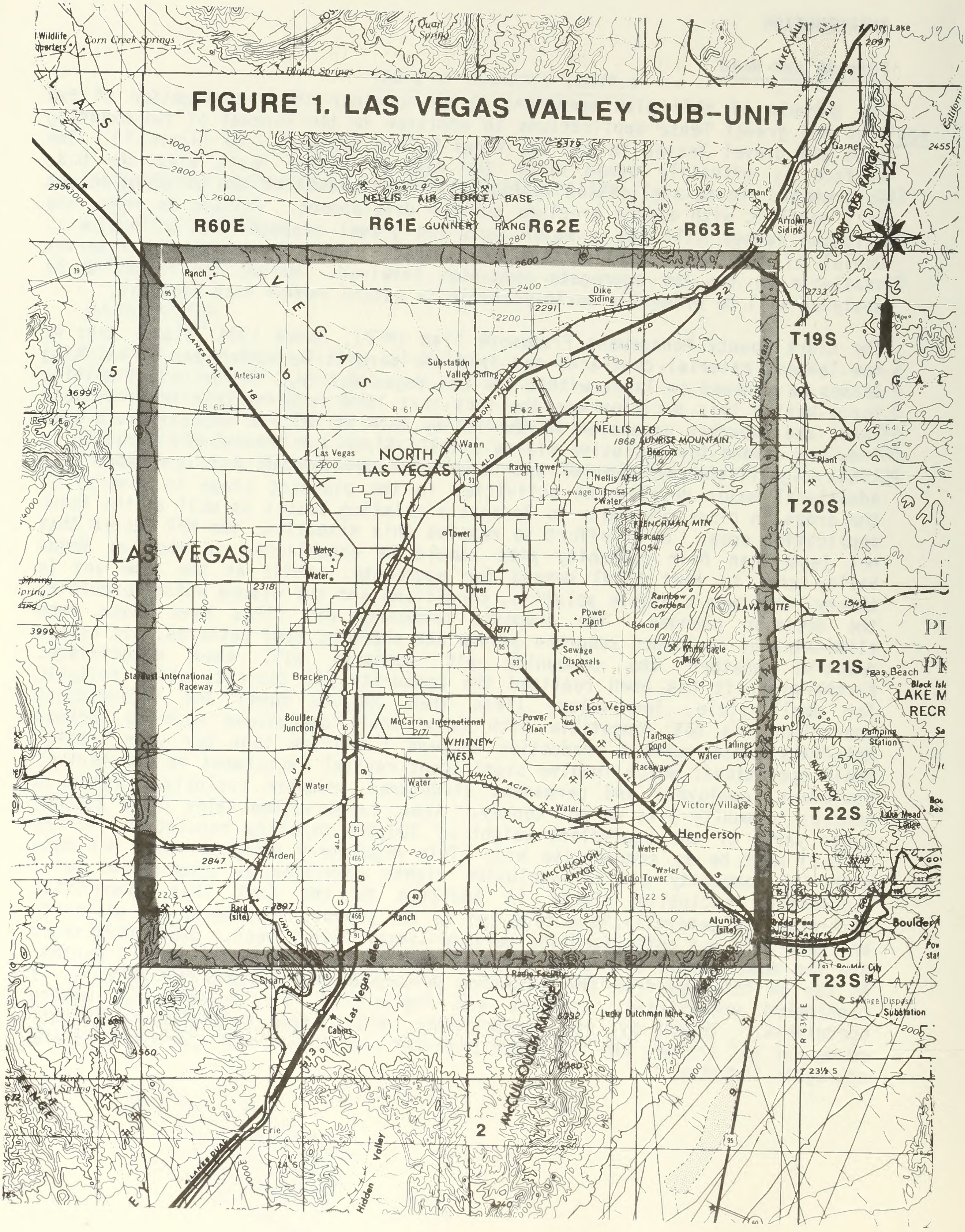


FIGURE 1. LAS VEGAS VALLEY SUB-UNIT

Location

As illustrated on Figure 2, the proposed amendment involves all of sections 10 and 16 and portions of sections 9 and 15 in T22S-R62E. Generally, the area is situated in the southeastern portion of the Las Vegas Valley about 3.5 miles northwest of downtown Henderson, Nevada. It is bordered .5 mile to the north by Sunset Road and on the south by Lake Mead Drive (State Highway 146). Gibson Road forms the east boundary of lease applications N-41931 and N-41639 and lease N-35779. All legal descriptions mentioned hereafter shall refer to T22S-R62E unless noted otherwise.

Background and Present Status

The lands in question were patented to the State of Nevada on October 6, 1932 under patent number 1058854 pursuant to the Nevada Exchange Act of June 8, 1926 (44 Stat 708). The State has since sold these lands to private interests. However, the Act reserved all oil, coal and other minerals (sand and gravel included) to the United States with the right to reenter upon said lands and to prospect for, mine, and remove said minerals under such conditions, rules and regulations as the Secretary of the Interior may prescribe. Such rules and regulations, pertaining to sand and gravel used to appear at 43 CFR 3563.2 and affected about 25,500 acres of land in Nevada, the bulk of which was confined to the Las Vegas area.

The aforementioned regulations have since been revoked and replaced by 43 CFR 3586, effective date May 22, 1986. Sand and gravel in such lands are no longer leasable but are now subject to disposal under 43 CFR 3600 which implements the Materials Sales Act of 1947 as amended. However, the regulations at 43 CFR 3586 recognize existing leases and provide for their continuance and still govern mining operations on them. The subject lease applications were filed before revocation of 43 CFR 3563 and thus are unaffected by the regulatory change.

Sand and gravel lease Nev-057863 (160 acres) was issued to Pacific Engineering and Production Company (PEPCON) on March 1, 1962. Assignment of the lease from PEPCON to the present lessee, Bonanza Materials, was approved effective on June 1, 1978. Although having expired on February 28, 1987, Nev-057863 remains in status quo because a renewal application was filed prior to its termination date. The renewal request, in effect, continues the old lease under its existing terms up to a point when final action is taken on the application as a result of this plan amendment. Mining has ceased on Nev-057863. At the present, it is used to house office, equipment, maintenance, and processing facilities. Said lease has been continuously in effect and active since 1962, some 25 years.

Lease N-35779 (approximately 780 acres) was originally granted to Ronald C. Yanke, effective date October 1, 1983, but has since been assigned to Bonanza Materials. Mining is presently occurring on this lease. As with the prior lease, N-35779 is subject to renewal, in 5 year increments, upon its expiration (September 30, 1988) at the discretion of the Secretary of the Interior.

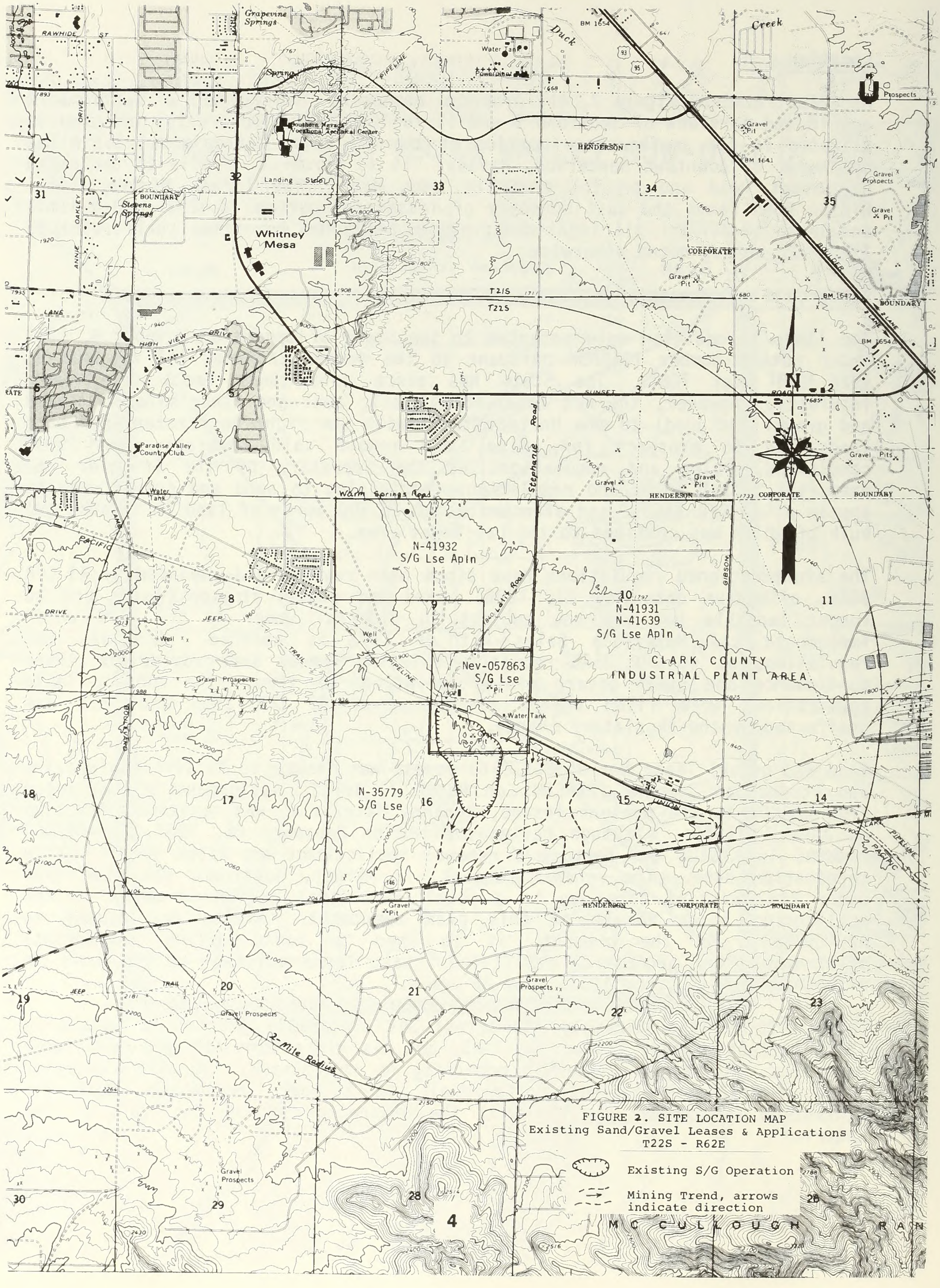


FIGURE 2. SITE LOCATION MAP
Existing Sand/Gravel Leases & Applications
T22S - R62E

Existing S/G Operation

Mining Trend, arrows indicate direction

Sand and gravel lease applications N-41931 (640 acres) and N-41932 (360 acres) were filed by Boyd P. Anderson, dba Bonanza Materials, on April 9, 1985. Lease application N-41639 (620 acres) was filed by ARC Materials, Inc., dba WMK Transit Mix, on March 15, 1985 for all of section 10 excepting the E½NE¼NW¼. All applications were filed with the intent to extend existing reserves and complement adjacent mining operations. WMK is presently mining in the SE¼ of section 3, T.22S., R.62E, on private surface and private minerals. Where dual applications exist, as in Section 10, the earliest filed application will prevail.

As stated earlier, the surface is entirely in private ownership by no less than 180 individuals or other entities. The majority of surface owners occur in the NW¼ of section 9 which has been subdivided (see Figure 3). Except for the NW¼ of section 9 and the E½NE¼NW¼ of section 10, the subject lands are without surface improvements. Dirtwork is being accomplished on the E½NW¼ of Section 16 to accommodate a trailer court, but to date, no improvements have been placed on the property.

Bonanza's Mining Operation

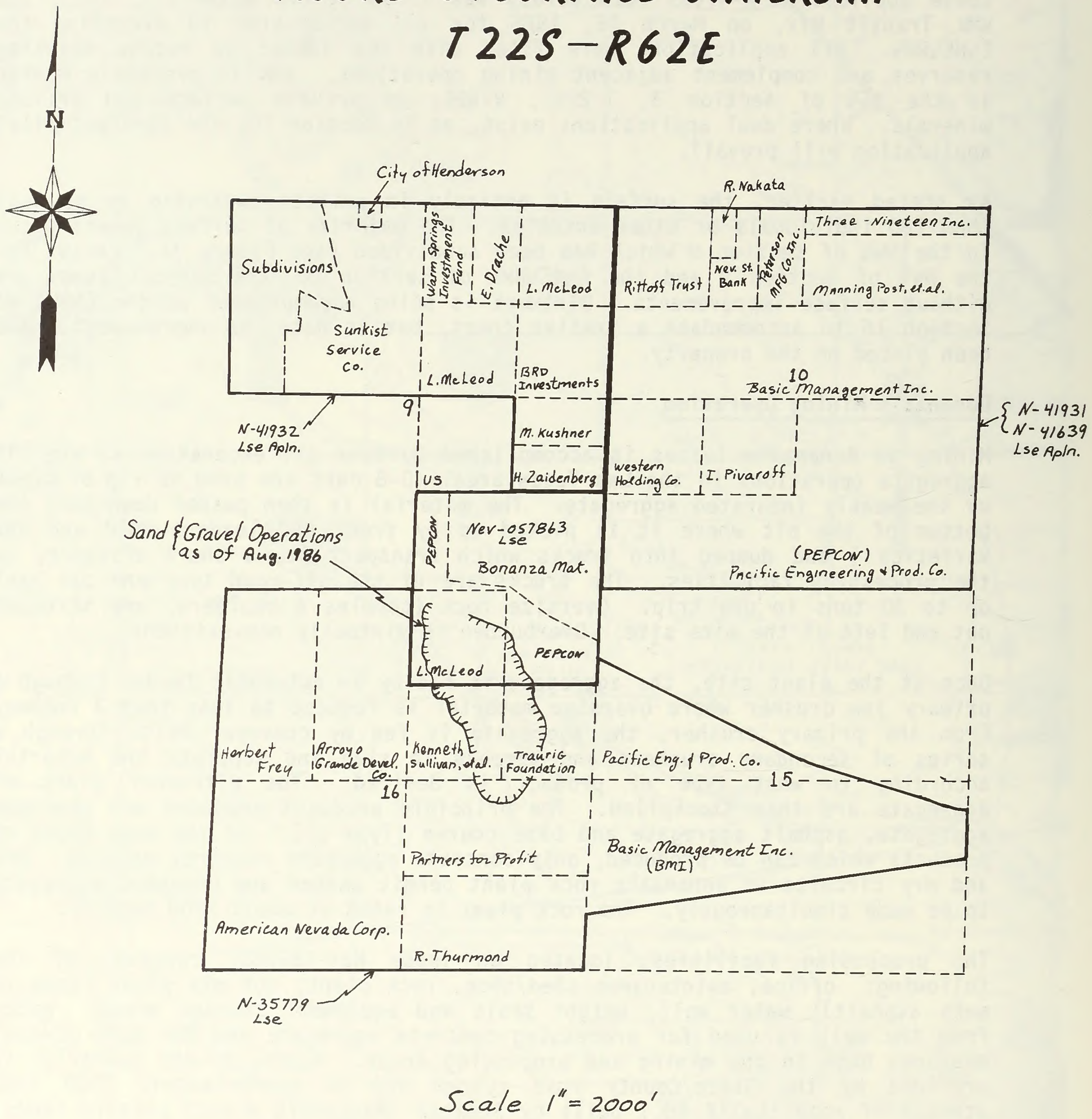
Mining on Bonanza's leases is accomplished by open pit excavation as are all aggregate operations in the Las Vegas area. D-8 cats are used to rip or break up the weakly indurated aggregate. The material is then pushed down into the bottom of the pit where it is picked up by front end loaders (988 and 992 varieties) and dumped into trucks which transport it, a short distance, to the processing facilities. The trucks are of the off-road type and can haul up to 30 tons in one trip. Oversize rock (cobbles & boulders) are screened out and left at the mine site. Overburden is virtually non-existent.

Once at the plant site, the aggregate is fed by an automatic feeder through a primary jaw crusher where oversize material is reduced to less than 3 inches. From the primary crusher, the aggregate is fed by conveyor belts through a series of secondary crushers and screens to size and separate the material according to what type of product is desired. The different sizes of aggregate are then stockpiled. The principle products produced are concrete aggregate, asphalt aggregate and base course (Type II). Of the many types of products which can be produced, only concrete aggregate requires washing. Wet and dry circuits in Bonanza's rock plant permit washed and unwashed aggregate to be made simultaneously. The rock plant is rated at about 1000 tons/hr.

The processing facilities, located on lease Nev-057863, consists of the following: office, maintenance shed/shop, rock plant, hot mix plant (used to make asphalt), water well, weight scale and equipment storage areas. Water from the well is used for processing concrete aggregate and for dust control measures both in the mining and processing areas. Access to the operation is provided by the State/County road system and an approximately 3000 foot stretch of road (Lalif Rd.) built by Bonanza Materials across private lands (See Fig. 2).

Production for the years 1985 and 1986 was 1.08 and 1.11 million tons, respectively. Bonanza materials is also responsible for the existence of three subsidiary companies, Bonanza Ready Mix, Industrial Construction and Anderson Transport. Bonanza Ready Mix and Industrial Construction rely on

FIGURE 3. SURFACE OWNERSHIP
T22S—R62E



Ownership data obtained from Clark County Assessor's Office as of October 21, 1986.

Bonanza Materials to supply them aggregate for the production of concrete and asphalt respectively. Anderson Transport, on the other hand, moves the aggregate from the mining area to the consumer.

PLANNING PROCESS AND OVERVIEW

Land Use Plan Objective

The proposed plan amendment is designed to meet the current mineral land use plan objective as stated in the Clark MFP. This objective states:

Manage public lands in Clark County so as to facilitate exploration and development of leasable, locatable and salable minerals.

Planning Process

The plan amendment process consists of seven basic steps, and requires the use of an interdisciplinary team. The planning steps described in the regulations, and used in preparing this amendment are described below.

1. Identification of issues.
2. Development of planning criteria.
3. Inventory data and information collection.
4. Formulation of alternatives.
5. Estimate the effects of alternatives.
6. Selection of the proposed amendment.
7. Implementation of the amendment.

Conformance Statement

The Preferred Alternative is not in conformance with the Clark County MFP. The MFP decision authorized the establishment of at least four community sand and gravel pits in the Las Vegas Valley. In addition, it specifically does not allow the issuance of any new leases or sales contracts or the renewal of existing leases or contracts upon their expiration. This plan amendment was initiated by the BLM after a review of the existing decision indicated that the decision, as written, no longer was appropriate. See the "Introduction" section of this amendment for a more detailed discussion.

Planning Issues and Criteria

Planning Issue

Issues drive plan amendments and indicate specific concerns the BLM or the public may have regarding the planning area. An issue is defined as an opportunity, conflict, or problem regarding the management of public lands and associated resources.

The issue of this amendment is the consideration of new lease applications filed prior to the revocation of 43 CFR 3563.2 and renewal of existing leases for sand and gravel on lands within the boundaries of the Las Vegas Valley Sub-Unit in Clark County.

Planning Criteria

Planning criteria were involved in the development of the alternatives and in the selection of the Preferred Alternative. Criteria for alternatives stated that a wide range of reasonable management actions which addressed the concerns of the Bureau and of the publics involved would be developed. Decision criteria stated that a Preferred Alternative will be developed that strives to provide for the viability of the present Bonanza sand and gravel operation while meeting the future development plans of the surface owners.

ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE

Objective

All alternatives, except No Action, strive, in varying degrees, to meet the original land use plan objective as identified in the MFP. This objective is to manage public lands in Clark County so as to facilitate exploration and development of leaseable, locatable and salable minerals.

Preferred Alternative: Modified renewal, deny lease applications.

Renew Bonanza's existing leases Nev-057863 and N-35779 for a five year period but with a reduction in lease size. The new configuration compromises competing surface uses but allows a viable mining operation to continue. Future renewals, not being limited by number, will be subject to review and lease adjustment, to include terms, conditions, size, and compatibility with surrounding surface uses. To reduce the surface/mining use conflict, lease applications N-41931, N-41932 and N-41639, will be rejected.

Alternative A: Renew Leases for one more five year period, deny lease applications.

Renew existing lease Nev-057863 for one more five year term. Existing lease N-35779 would be renewed in 1988 for a term less than five years such that both leases would expire February 28, 1992. This alternative would provide Bonanza Materials with sufficient time to consider relocation, either on private or government land. Since the mining of Federal minerals would end in 1992 under this alternative, there is no justifiable reason to expand aggregate mining operations further, and hence, the three lease applications will be denied.

Alternative B: Renew leases indefinitely, approve lease applications.

Renew the existing leases indefinitely, in five year periods to Bonanza Materials for as long as aggregate reserves are present and Bonanza submits their renewal applications as required by regulation. Approve lease applications N-41639 or N-41931 and N-41932 where no surface improvements are currently in place at the time of the final decision. Implementation of this alternative will enlarge and intensify the existing conflict, expand Bonanza's existing reserves and bring yet another aggregate producer, WMK Transit Mix, into the picture.

Alternative C: Renew leases until Bonanza Materials is moved to an alternative site, deny lease applications.

Leases Nev-057863 and N-35779 will be renewed until an alternative site can be found for the mining operation but not necessarily the processing facilities. Bonanza Materials owns the surface on which the processing facilities are located. Relocation of the mining site would be a coordinated effort between Bonanza Materials and the Las Vegas District. An alternate site has been identified by said company which involves land in Sections 5, 6, 7, 8 in T. 23S., R. 62E. Since the existing leases are to be phased out, the three lease applications will be denied for reasons of continuity.

Alternative D: Partial renewal of Nev-057863, let both leases expire in 1988, deny lease applications.

This is, in effect, a no action alternative but it differs in that lease Nev-057863 would be renewed so its expiration (Feb. 28, 1987) coincides with that of lease N-35779 (Sept. 30, 1988). Nev-057863 provides access to N-35779 where mining is presently occurring. Letting Nev-057863 expire nullifies N-35779. The construction of new access across the Union Pacific Railroad is impracticable because of the short time frame involved. Since the existing leases are to be phased out, the three lease applications will be denied for reasons of continuity.

Alternative E: Let both leases expire according to Clark County MFP, deny lease applications (No Action Alternative).

The Bureau would take no action by making no change in the Clark County MFP. Existing leases Nev-057863 and N-35779 would not be renewed upon their expiration (Feb. 28, 1987 and Sept. 30, 1988 respectively) and the three lease applications would be denied.

AFFECTED ENVIRONMENT

General

As stated in the "Introduction", the biologic environment is not the primary issue affected by this plan amendment since all of the approximately 1,900 acres are privately owned except for the alternate mining site identified in Alternative C. The primary conflict to be analyzed is current or proposed use of the private surface versus mining of the Federal mineral estate. Given these circumstances, little needs to be said about the biologic environment and as such this document will concern itself primarily with the socio-economic aspects of the conflict.

Various types of development are slowly encroaching on the existing leases and applications. However, the private properties surrounding the subject lands, within a two mile radius from the center of lease Nev-057863, are, for the most part, still undeveloped as yet (see Figure 2). Pacific Engineering and Production Company of Nevada (PEPCON) and Kidd and Company, Inc. are situated east and adjacent to the subject lands in the NE¼ of section 15. PEPCON manufactures chemicals while Kidd and Company produces marshmallows. Basic Management Inc. (BMI) is located about one mile due east of PEPCON. BMI is a large industrial complex which refines titanium ore and manufactures various chemicals. To the north and northwest, subdivisions are present in the SW¼ of section 4, the NE¼ of section 8 and scattered throughout section 5. Surface improvements are absent due west and south of the subject area except for numerous dirt roads in sections 21 and 22. It is presumed from their configuration that the roads were built to accommodate subdivisions.

Two gravel operations similar to Bonanza Materials are active just north of the subject lands. Unlike Bonanza Materials, both the surface and mineral estate are owned by the aggregate producers. WMK Transit Mix mines in the south half of section 3. Base course (Type II), asphalt and concrete rock are the major products produced. Facilities on the site include a rock plant, hot plant and concrete batch plant. One-half mile north of WMK, Las Vegas Building Materials mines aggregate in the S½ of section 34, T21S-R62E. Their products and processing equipment are essentially the same as those of WMK. The company's office and processing facilities are located in section 35 on the east side of Boulder Highway.

A forty acre island of public land, described as the NW¼SE¼ of Section 9, exists just north and adjacent to lease Nev-057863. The Nevada Department of Transportation (NDOT) acquired mining rights to this parcel by obtaining a Free Use Permit (NV-056-FU6-03) from the Bureau on December 5, 1985. NDOT intends to use this site as a gravel source for local road maintenance but may also use it to satisfy borrow/gravel needs on contracts to be let in conjunction with construction of the expressway (I-515). The permit expires on December 4, 1995.

Existing Leases and Lease Applications

Surface Improvements

At this time, there are no surface improvements on the already leased lands, except of course, for Bonanza's processing facilities. Dirt work is being accomplished, however, on the E½SW¼ of Section 16 by the Arroyo Grande Development Company for the purpose of developing a mobile home estate park. Surface improvements on the lands under lease application are present in NW¼ of Section 9 and the NE¼NW¼ of Section 10. The W½NW¼ of Section 9 is subdivided and contains no less than 180 houses. A water tank, owned by the City of Henderson, is also present in the NE¼NW¼NE¼NW¼ of Section 9. Peterson Manufacturing Company, Inc. is present in the E½NE¼NW¼ of Section 10. Said company operates a rendering plant at this location as the Nevada Star Company.

Ownership and Proposed Surface Use

Figure 3 illustrates ownership configuration according to the Clark County Assessors Office as of October 21, 1986. Lease Nev-057863 involves 3 surface owners while lease N-35779 contains 9 surface owners. Surface owners on the lease application lands amount to 18 if only the larger tracts of land (greater than 2.5 acres) are considered. If the homeowners in the W½NW¼ of Section 9 are accounted for, total ownership approximates 200.

a. Lease Applications

All surface owners on the lease application lands who responded to the Las Vegas Districts scoping letter of October 30, 1986, were generally opposed to aggregate mining on the existing leases and its continued proliferation if the lease applications were authorized. While many did not provide specific development plans, the majority of responses implied mining would render the land worthless for any type of development, that mining lowered real estate values and the present operation and leases were hindering various development plans in an area of rapid suburban growth. Surprisingly, no responses were received from homeowners in the NW¼ of Section 9.

Four surface owners, in the area under lease application, stated what type of development was going to occur. Sunkist Service Company (Metropolitan Homes) plans to construct residential subdivision on the remaining undeveloped land in the NW¼ of Section 9. Construction is presently underway. Meyer Kushner, owning property described as the N½NE¼SE¼, Section 9, plans to subdivide and build homes. Three Nineteen, Inc., owning land in the N½N½N½NE¼, Section 10, contemplates the development of industrial lots. PEPCON and its affiliated companies are in the beginning stages of developing a major industrial park, Gibson Business Park, on their holdings in Sections 10 and 15 (Sec 10: N½SE¼, S½S½; Sec 15: N½). In as much as PEPCON is opposed to authorization of the lease applications because of interference with their industrial park project, they are in favor of continuation of the existing leases. Lands in the S½N½N½NE¼, S½N½NE¼ of Section 10, owned by Manning Post, et. al., are also earmarked for industrial type development.

PEPCON's industrial park project is in conformance with the City of Henderson's Master Plan for land use. Figure 4 is a modified version of Henderson's Comprehensive Land Use Policy Plan with townships, sections and existing gravel operations being added. Many of the roads, such as Stephanie, Arroyo Grande, Warm Springs and I-515, have yet to be built. In general, the area west of Stephanie Road is recognized as having residential potential. East of Stephanie, the plan shows a light and heavy industry classification. It is interesting to note that while the Land Use Policy Plan emphasizes development, it makes no mention of source areas for construction materials (aggregate) needed for development nor does it recognize the three existing gravel operations that lie within its boundaries.

As a further indication of impending development, the Economic Development Administration, Dept. of Commerce, recently approved a $1.5 million grant to Clark County for the construction of a waterline from Russell Road to Gibson Business Park and for the construction of public roads in the area. According to Clark County's grant application, the waterline will run close to and parallel to Stephanie Road when the road's southern extension is finished. Stephanie Road, as indicated on Figure 4, will connect Sunset Road with Lake Mead Drive (St. Rt. 146). It will be built along the common section line between 9 & 10; 15 & 16 and is planned as a 100 foot wide street.

b. Existing Leases

Of the 11 surface owners involved, PEPCON (owning property in each lease) was the only one completely in favor of renewing the existing leases. Those opposed gave reasons quite similar to those surface owners in the preceding section. The majority felt a continuation of gravel mining would render the land worthless, lower real estate values and impede development. Only a few surface owners provided development plans.

As illustrated on Figure 3, Bonanza Materials and PEPCON own the majority of the surface on lease Nev-057863. The bulk of Bonanza's processing facilities, incidentally, are situated on its own surface. By their own admission, PEPCON has no objection to Bonanza Materials using their surface for mining and hence there is no conflict. However, Angus McLeod, owner of the NW¼NE¼ of Section 16, is opposed to gravel mining on his land and understandably against renewal of the existing leases. Mining on lease Nev-057863 has ceased on McLeod's parcel even though Bonanza admits minable gravel still exists but at a greater depth. Bonanza is presently backfilling the pit in the NE¼ of McLeod's property. Despite the fact Bonanza does not plan to mine this parcel, it is essential to the mining operation as it provides access under the Union Pacific Railroad (UPRR) from the office/processing facilities to the area now being mined directly south of McLeod's property. As a matter of fact, all of the potentially mineable aggregate on both leases is situated on the south side of the UPRR tracks while the mill is on the north side. It is possible that different access routes could be built to bypass McLeod's property.

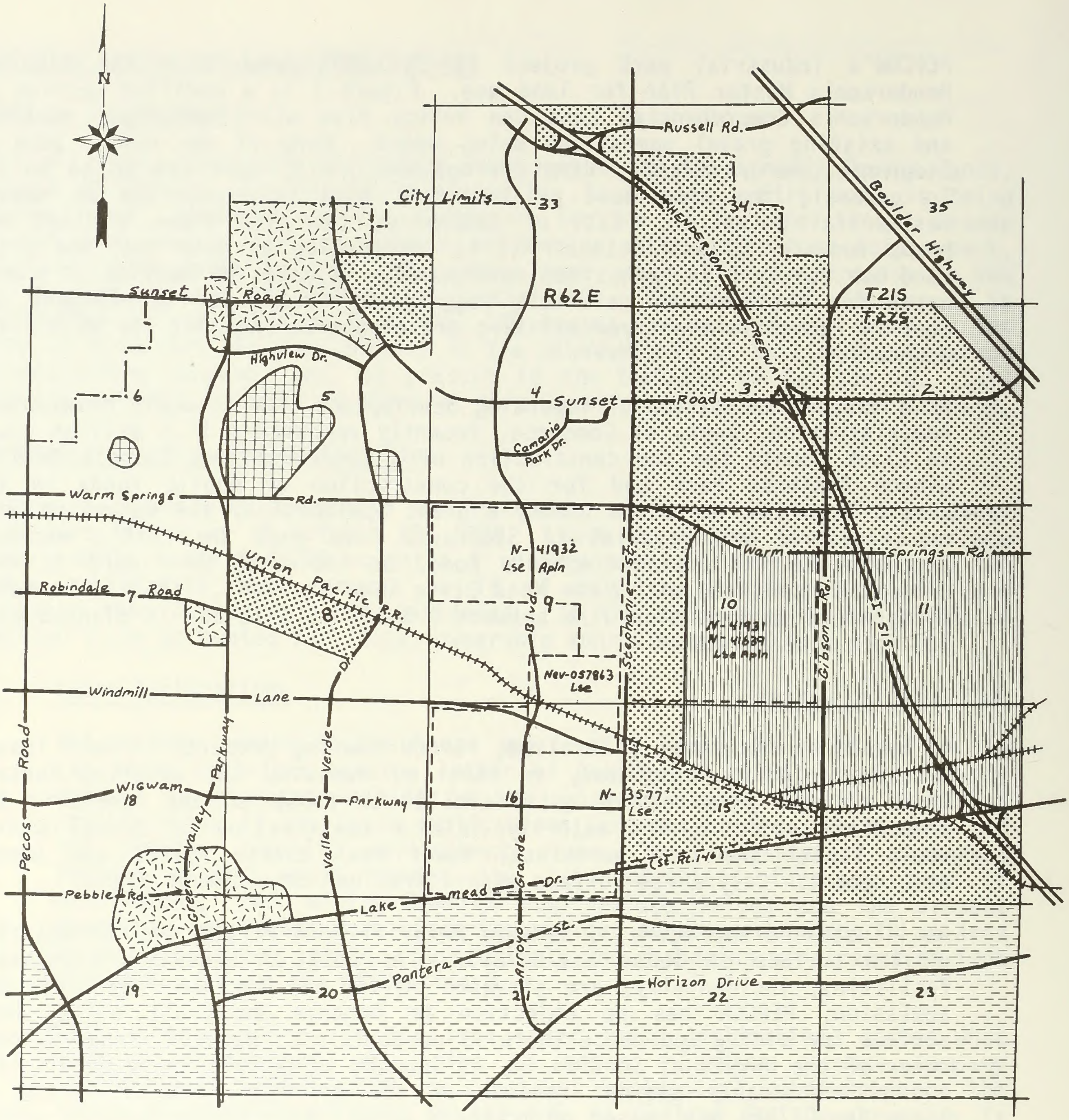


FIGURE 4. LAND USE POLICY PLAN
CITY OF HENDERSON

Residential
Playgrounds, Public Utilities
Limited Service Area
Community, Neighborhood Shopping
Light Industry
Heavy Industry
Tourist Commerical

 Modified from Henderson Master Plan, 1986.

One route could stay in the UPRR right-of-way once through the underpass. The other could cross the railroad tracks at a different point, but would involve the construction of either an underpass or railroad crossing and the expenditure of significant funds. Both alternative routes would require consent of the UPRR and a firm commitment on the part of Bureau relative to future gravel mining.

Only three of the nine surface owners of lands in N-35779 responded to our scoping letter of October 30, 1986 with specific development plans. Herbert Frey, owning land in the $W\frac{1}{2}NW\frac{1}{4}$ of Section 16 intends to subdivide and build residential homes. Arroyo Grande Development company, owning approximately the $E\frac{1}{2}NW\frac{1}{4}$ of section 16, is in the initial stages (dirt work) of constructing a 356 lot mobile home estate. Improvements include extending utilities and paving Windmill Lane for 1.25 miles (presumably in a westerly direction) and construction of all on sites, including paved streets, curbs, sewer, water, electric, cable TV, swimming pools, spas, and a 5,000+ sq. ft. club house surrounded by acres of landscaping.

Kenneth Sullivan and Mark M. Collins are joint owners of approximately the $SW\frac{1}{4}NE\frac{1}{4}$ of Section 16 (Sullivan, 1987). They formerly owned the $E\frac{1}{2}NW\frac{1}{4}$ of Section 16 but sold it to Arroyo Grande in March of 1986. By an independent agreement, dated March 13, 1986, Bonanza Materials agreed to relinquish their mining rights to the $E\frac{1}{2}NW\frac{1}{4}$ and in turn, Mark Collins and presumedly Kenneth Sullivan also, conceded to gravel mining on the $SW\frac{1}{4}NE\frac{1}{4}$ of Section 16 for a period of ten years, beginning from the date of the agreement. Bonanza's mining operation currently occupies perhaps 50 percent of this parcel as of August, 1986 (see Figure 3).

The $SE\frac{1}{4}NE\frac{1}{4}$ of Section 16 is owned by the Traurig Foundation. Although Traurig provided no specific development plans for their property, the Foundation is opposed to the continuation of gravel mining because the mining operation is in an area experiencing rapid suburban growth. Bonanza's gravel operation has consumed, perhaps 45 percent of the Foundation's property as of August, 1986. It was just recently learned that the City of Henderson is seriously considering the purchase of this property for the purpose of building a baseball park (Bloomquist, 1987). Construction of the park will necessitate removal of considerable material to provide a flat surface because of hilly terrain present on the parcel. The time frame for the transaction was uncertain. Discussions with Bonanza Materials on the project have already taken place. Under the circumstances, the City of Henderson had no objection to Bonanza mining gravel on this 40 acre parcel.

PEPCON owns the entire $N\frac{1}{2}$ of Section 15 but only a triangular tract of land adjacent and south of the UPRR is part of lease N-35779. PEPCON has no objection to this tract being mined for its aggregate resource. In fact, PEPCON strongly supports the renewal and/or extension of the sand and gravel leases now held by Bonanza Materials. To date, no mining has occurred on this parcel.

BMI is the owner of the S½ of Section 15 and lease N-35779 encompasses nearly 50 percent of their surface. Lake Mead Drive forms its southern boundary. To date, no mining has taken place, although Bonanza may start mining on its eastern end if and when contracts are let by NDOT for the continued construction of I-515. According to the proposed route, I-515 will pass diagonally through Section 14 about 1/2 to 3/4 miles east of the lease area (see Figure 4). Although BMI is opposed to mining aggregate on their land in Section 15, the company has no immediate plans for future development of the property (Taylor, 1987).

The remaining surface owners in Section 16, American Nevada Corp. (ANC), R. Thurmond and Partners for Profit, are understandably against the mining of their land although development scenarios were not presented. The lands belonging to ANC and Thurmond are still undisturbed by the mining operation. Mining has proceeded into the north-central portion of the property owned by Partners for Profit (see Figure 3) and will undoubtedly consume much of the W½ of the Partners property before lease N-35779 expires in 1988.

<u>Mineralization and Mining Trends</u>

The aggregate being mined occurs as a fan pediment (lateral coalescence of alluvial fans) originating from the McCullough Range 1 to 1.5 miles south of the lease area. The process of degradation (lowering of surface by erosional forces) in modern times has dissected the fan piedmont with numerous gullies or dry washes leaving low relief ridges or flat topped hills in between. Since the McCullough Range is of volcanic origin, the material comprising the fan is also volcanic. The most common rock types found are basalt and andesite.

Bingler (1977) has mapped, in great detail, the various sediments which outcrop in the Las Vegas SE 7½' quadrangle. Although lithologic differences may be subtle, at least 6 geologic units have been identified on the subject land. For purposes herein, it is sufficient to say the general nature of the aggregate in all units is unconsolidated, poorly sorted and ranges in size from boulder to silt. Most of the surface, except for the wash areas, is covered by a boulder lag. Caliche layers, being thin and inconsistent, do not present an obstacle to the mining operation.

The best material lies within the wash areas. As a rule, it is generally less compacted than that of the ridges and hills in addition to having less caliche coatings on it aggregate surfaces. The latter makes it desirable for concrete and asphalt aggregate although it can be used for any other type of construction material. The material comprising the hills/ridges often contains a greater abundance of silt and sand size material and consequently, is better suited for borrow or base course. Caliche coatings are also quite common on the rock surfaces.

Mining in Section 16 is presently proceeding southward along a major wash (see Figure 2). Bonanza intends to mine this wash up to the right-of-way boundary for St. Rt. 146. Current mining depth is estimated

to be 15-20 feet below the dry wash level. Land belonging to Partners for Profit and R. Thurmond will be disturbed during the process. The land belonging to Thurmond south of St. Rt. 146 in Section 16, will not be mined (Nelson, 1987). Bonanza has no firm plans for mining in the W½ of Section 16 and in fact, when questioned, was reluctant but agreeable to deleting the W½ of Section 16 at lease renewal time in September 1988 (Anderson and Nelson, 1987).

The high ground in the E½ of Section 16 has to date, been left untouched. However, plans are currently being formulated to extend the mining operation in an easterly direction into Section 15 as illustrated on Figure 2. The primary objective will be mining of the wash in Section 15. It is assumed the high ground between the two washes will be mined from north to south as the need for borrow and base course arises. Bonanza also intends to use the extreme east end of lease N-35779 as a source area for borrow in the construction of I-515. This project, of course, is dependent on NDOT's timetable and contract awards. It is conceivable that all of Section 15 could be mined between the UPRR and St. Rt. 146. Land belonging to PEPCON and BMI in this area as of January 26, 1987 was still undisturbed.

Referring to Figure 2, it is not known how mining would proceed if the lease applications were authorized. Neither Bonanza or WMK has said anything about the matter. However, in the case of Section 10, where double applications are filed (Bonanza, N-41931; WMK, N-41639) WMK having the prior filing, would probably prevail. WMK, in all likelihood, would simply proceed south from Section 3 into the northern part of Section 10. No assumptions can be made for Bonanza's lease application in Section 9 except mining could be ruled out in the NW¼ because of the existing residential subdivisions.

Economic Situation

The Nevada State Directory of Nevada Mine Operations Active During Calendar Year 1985 reports 42 mining operations in Clark County during that year. Of these, 24 were engaged in the extraction of sand and gravel for construction or industrial purposes, and employed a total of 181 people. Total employment in the mining industry in Clark County was estimated at 310 at that time. However, during the fourth quarter of 1986 mining industry employment declined by 100 jobs, or about 32 percent, to an estimated 210 persons.

This occurred in contrast to the healthy and growing Las Vegas economy. Total employment in the Las Vegas area for December 1986 averaged 272,700 reflecting a 5 percent increase over the December 1985 figure of 259,700. Unemployment declined from 8.3 percent of the labor force in the fourth quarter of 1985, to 5.8 percent in the last quarter of 1986. This represents a decline in joblessness from 25,000 to 18,000 people.

Sand and gravel operations remain the healthiest segment of the Clark County mining industry due largely to the growth and development within the Las Vegas metropolitan area. High demand for these essential construction materials will be sustained by residential construction,

industrial construction, and road building. The Nevada Employment Security Department reported, in the Economic Update for the 4th Quarter 1986, that a total of 11,245 residential construction permits were issued through November of 1986, an increase of 37 percent over the same period in the prior year.

Bonanza Materials, the present lease holder, is one of the largest sand and gravel operations in Clark County and employs 32 people in its mining operation. Current production is about 120,000 tons of sand and gravel per month, with an annual payroll of approximately $874,000. Three subsidiary companies (Industrial Construction, Anderson Transport, and Bonanza Redi-mix) require 106 additional permanent full-time employees, swelling the total payroll to $4.8 million. Contract welders are also retained at an additional cost of $711,500.

The operations of the four companies are totally interrelated, with the three subsidiary companies being 100 percent dependent upon Bonanza Materials for the base product. Total gross sales for the four companies combined, in 1986, were $16.8 million, with $1.7 million paid in taxes and royalties to the State, County, and Federal governments. The regional economic effect of Bonanza's operation is more significant, however, than that generated directly by its extraction, processing, and transportation of industrial and construction sand and gravel materials. The goods and services purchased by the four companies and their employees have an indirect effect which creates additional jobs and income throughout the economy. Based on multipliers developed by the University of Nevada, Bureau of Business and Economic Research, for their 1983 mining industry study, it is estimated that about 178 additional jobs are created with additional personal income of approximately $5.9 million. Total personal income generated within the economy, then, is estimated at $10.4 million with about 318 full-time jobs.

A major concern of the leasing decision is the existing land value and its development potential. While the lands were originally transferred to the State of Nevada at nominal value, and subsequently to private purchasers, the vigorous growth and development of the Las Vegas and Henderson areas have enhanced the value of these lands and rendered them increasingly desirable for development. The proper administration of the Federal mineral rights must take into consideration the surface occupancy and potential.

The lands in lease application areas N-41931 and N-41639, which consist of all of Section 10, are zoned for light and heavy industry. Total assessed value is $261,160 with an appraised value of $746,171. Improvements exist only on property No. 210-17-002, assessed at $14,511 with an appraised value of $41,460.

Lease application area N-41932 is all within Section 9 and consists entirely of 329 separate properties, all under residential zoning. Assessed value of the land alone is $711,211, with appraised values totaling $2,032,031. However, existing improvements on 112 of those properties are assessed at $870,095 with an appraised value of $2,485,986, making a total assessed value of $1,581,306 and a total appraised value of $4,518,017.

Lease area N-057863 lies within Sections 9 and 16 with surface ownership held by three parties. Zoning is residential. Bonanza owns 4 of the 8 properties within the lease, controlling 70.9 of the 143.01 total acres. No mining is presently taking place or planned for this lease area, however Bonanza's office, operations, and processing complex are located on their surface owned properties. Assessed value and appraised value of all land within the lease area is $43,293 and $123,694, respectively. Improvements exist only upon property number 210-216-012, owned by Bonanza and assessed at $34,821 with an appraised value of $99,489.

Existing lease area N-35779 is comprised of the majority of Section 16 and about one-third of Section 15. It contains no improvements at the present time and is zoned residential or light industry. Land values are assessed at a total of $257,011 with an appraised value of $734,317. All present sand and gravel mining is taking place within this lease.

Alternate Site

General

The alternate site (Figure 5) is located on public lands in the south-central portion of the Las Vegas Valley in T.23S., R.62E., Sections 5 thru 8. Bonanza Materials identified and suggested this area primarily because of its close proximity to their existing facilities, quality of material and reserves. From the southwest corner of lease N-35779 to the north line of Section 6, T.23S., R.62E., it is approximately five miles by the Lake Mead/Eastern Avenue route.

As Figure 5 illustrates, the site is bounded on the north and west by private lands and by Federal lands on its south and east sides. Reasonable access does not exist at the present because of legal and physiographic restraints. A few roads leading to the site and shown on Figure 5, are associated with public utility right-of-way (R/W) grants and cannot be interpreted for use by the public at large particularly where they cross private lands. Eastern Avenue is only partially dedicated and thus not all of it is available for use by the public at large where it crosses private lands.

Development on private property within 2 miles of the subject lands is sparse. To the north, in Sections 29 and 30, T.22S., R.62E., roads have been bladed to accommodate what appears to be future housing subdivisions. Surface improvements are absent in Sections 31 and 32 of the same township. Section 25, in T.22S., R.61E., contains a few buildings/houses in the N½SE¼. In the same township, Section 36 lacks improvements except for the presence of several dirt roads. About 1.5 miles due west of the alternative site is the Sky Harbor Airport facility being located in the W½ of section 2, T.23S., R.61 E. (not shown on Figure 5). Section 1 of T.23S., R.61E., lacks significant improvements but does contain a R/W access road and a small gravel pit located in the SW¼SE¼. The remainder of the lands surrounding the alternative site are public lands and contain no surface improvements except for utility rights-of-way.

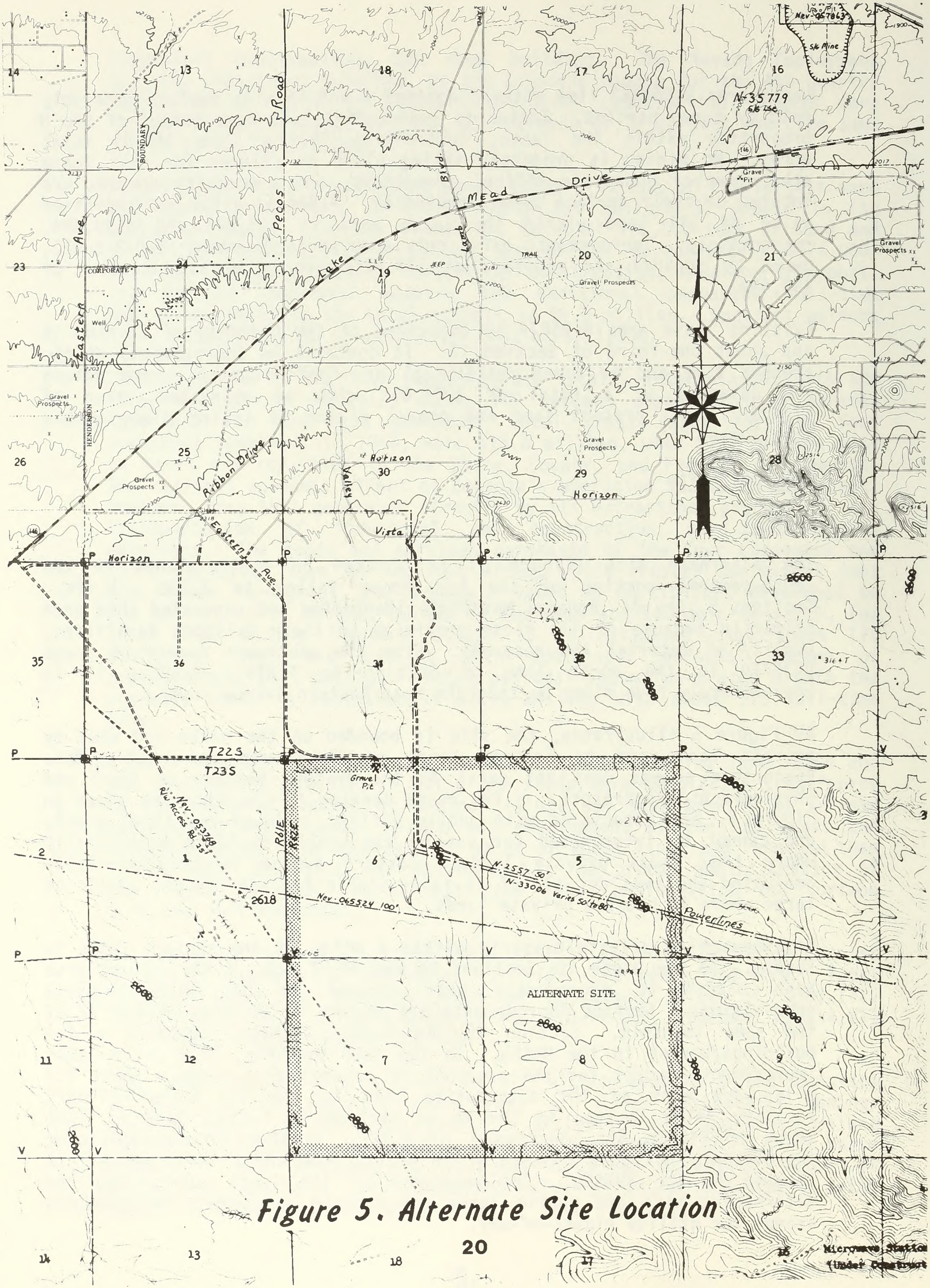


Figure 5. Alternate Site Location

Both the surface and mineral estates are owned by the Federal government. Improvements on the land, other than utility rights-of-way and a small gravel pit, are nonexistent. Data pertaining to the four rights-of-way that encumber the proposed mining area is given below. Their location is illustrated on Figure 5. Any approved mining operation would have to be made subject to the existing rights-of-way.

N-2557: Grantee is Nevada Power Company for a 230KV power transmission line. Width is 50' each side of R/W centerline. R/W granted on Jan. 22, 1969.

Nev-065524: Grantee is presently Western Area Power Administration (DOE) for a 750KV DC power transmission line. Width is 100' each side of R/W centerline. R/W granted Feb. 24, 1966. No construction has occurred to date.

N-33006: Grantee is Nevada Power Company for a 230 KV power transmission line. Width varies from 50' to 80' on each side of R/W centerline. R/W granted Mar. 15, 1982.

Nev-053768: Grantee is AT&T for an access road and a 300 X 200' communications site on Black Mountain. Access width is 25' on each side of R/W centerline. R/W was granted on Mar. 26, 1960. A portion of said R/W has since been relinquished by the grantee in the SW¼NW¼ of Section 36, T.22S., R.61E.

Other encumbrances, such as mining claims, are absent. BLM mining records indicate the alternate site is free and clear of mining claims as of January 16, 1987.

Sand and gravel, until recently, was being mined in the NE¼NE¼NW¼ of Section 6, T.23S., R.62E. under authority of BLM contract NV-056-CT4-06. The contract was for the removal of 17,000 cubic yards of aggregate. Said contract expired June 2, 1986.

The northeast-southwest trending McCullough Range forms the east and south sides of the alternate site and is the source area for all aggregate deposited there. Reflecting the McCullough Ranges volcanic origin, this clastic material consists of andesite and basalt rock types. The material is very similar in composition, if not the same, as being currently mined on the existing leases. It occurs as, and in, alluvial fans, dry washes and pediment structures.

It should be realized that any mining operation authorized on the subject lands would in all probability not encompass the entire 4 sections. The mining area would be limited in size by such factors as, but not limited to, annual production, capital investment, processing facilities, reasonable reserves, and topography. An acreage of 640 to 700 acres is envisioned. However, location would be by choice of Bonanza Materials. Mining in the E½ of Sections 5 and 8 in T.23S., R.62E., would probably be precluded because of the mountainous terrain.

Cultural Resources

A Preliminary Class I (Data Review) Inventory was conducted for Sections 5-8 in T.23S., R.62E. It was found that two inventories were conducted, one cataloged as 5-1133(N) involved 80 acres in Section 6 and the other, a linear survey, 5-657(P), cutting though Sections 5 and 6. A "possible quarry area" was mapped in Section 5 but no artifacts were observed. A few inventories, 5-1460(N), 5-358(N), and 5-590(N), in adjacent sections were for less than 1 acre each. All inventories were negative in results.

If approximately one section was to be mined at a time, then probably the first section or combination of 640 acres to be mined would require a 100 percent (30 meter transect) coverage. Other areas or perhaps sections, barring important sites being found, could be sampled at probably 25 percent. If the entire alternate site was contracted all at once, the cultural survey should sample 25 percent of all sections.

The area in general, without an abundance of inventories, can be classed as probably "low to medium sensitivity". The greatest potential for artifacts is the volcanics and cherts found in the vicinity.

Wilderness

Although relatively close, the proposed mining area is not in a Wilderness Study Area (WSA). The north boundary of the North McCullough Mountains WSA (NV-050-0425) lies 1.25 miles south of the southern boundary of the alternate site.

Vegetation

Vegetation on the subject lands is part of the Salt Desert Shrub Community of the Mojave Biome. Creosote, burro brush, salt bush, spanish dagger and mojave yucca are the principle plant types found. There are no threatened or endangered plants which grow on the alternate site.

Wildlife

Jackrabbits, lizards, snakes, coyotes, quail and ground squirrels are the primary types of wildlife which may use or inhabit the subject lands. Threatened or endangered species are non-existent. The desert tortoise, a sensitive species but not on the endangered species list, may also inhabit or frequent the subject lands. Data, on the other hand, indicates the subject lands are not critical habitat for the reptile, and the site in general is rated as having a low tortoise population density.

Watershed

Salinity status is unknown on the alternate site due to the lack of detailed soil survey information.

ENVIRONMENTAL CONSEQUENCES

Preferred Alternative: Modified renewal, deny lease applications.

The Preferred Alternative attempts to compromise the competing land uses by reducing the existing lease size and by rejecting the three lease applications. It takes into account land already disturbed by the mining operation, lack of surface owner objection to mining, the rapid urban growth of the area, future surface development plans and the need for aggregate resources in the Las Vegas area. Under this action, Bonanza will be able to continue mining without disruption. The vast majority of surface owners, on the other hand, will be able to proceed with their development plans since the threat of mining has been eliminated. Specific consequences of the Preferred Alternative are as follows;

1. Rejecting the lease applications will prevent the proliferation of mining in the area and permit proposed surface development to proceed in Sections 9 and 10 unencumbered by the leasable sand/gravel reservation. Surface improvements already exist in the NW¼ of Section 9 and E½NE¼NW¼ of Section 10.

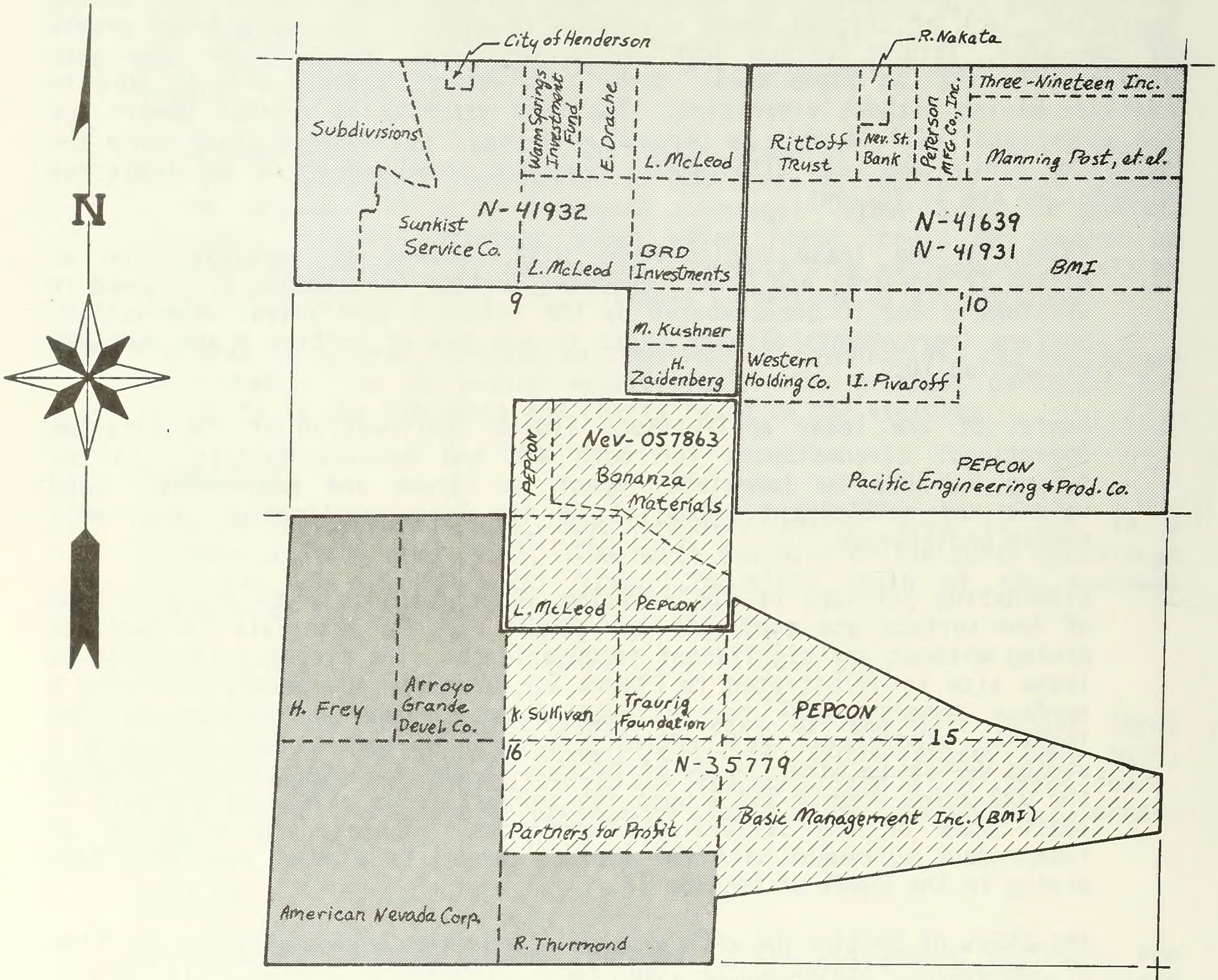
2. Denial of the lease applications limits continuation of the existing operational circumstances for both WMK and Bonanza Materials in the future but has no immediate impact on income and employment. Land values and development potential in the lease application areas will remain undisturbed.

3. Eliminating portions of the existing leases will help to diminish some of the surface use conflicts but permit Bonanza Materials to continue mining without any significant inconvenience. The proposed reduction in lease size is illustrated in Figure 6. Overall, 400 acres, involving 4 surface owners, will be excluded from further encumbrance by the leasable sand/gravel reservation. Bonanza Materials does not have a strong desire to mine the W½ of Section 16 and is agreeable to excluding the 320 acres from N-35779 upon its renewal in an effort to mitigate at least some of the surface use conflicts. Bonanza, by means of an independent agreement with the surface owner, is already precluded from mining in the E½NW¼ of Section 16.

   The S½SW¼ of Section 16 will also be eliminated from N-35779 at the time of renewal. State Route 146 cuts diagonally across this parcel separating it into nearly equal halves. Bonanza does not intend to mine the area south of the highway because of the need to construct access across the highway and the absence of large aggregate reserves. The aggregate reserves north of the highway can be mined as part of the on-going operation before expiration of the lease which occurs on September 30, 1988.

   Serious consideration was also given to excluding the NW¼NE¼ of Section 16, or at least a portion of it, because it is no longer being mined. In terms of access, however, this parcel forms an integral part of the mining operation as it provides the only means of crossing the Union Pacific railroad tracks (see Figure 2) from the processing facilities to

FIGURE 6. LEASE/MINING BOUNDARIES OF THE PREFERRED ALTERNATIVE



T22S - R62E

Lease application area to be rejected

Area to be deleted upon lease renewal

Existing lease area to be renewed

the mining area. The railroad R/W is so situated that at least a portion of it must remain in Nev-057863 in order to provide Bonanza legal access.

Mr. McLeod's 40 acres were divided into numerous smaller aliquot parts with the intention of freeing at least a portion of the land from the mining encumbrance and preserving Bonanza's access. None proved fully satisfactory for either party. No matter how the 40 acres were sectioned, McLeod could not enjoy his full surface rights. Other configurations created "islands" in the midst of a sand and gravel operation which would be both undevelopable and highly undesirable. Bonanza, on the other hand, would be faced with longer haul routes, possible road construction within the railroad right-of-way (UPRR has never been approached on this subject), and higher road maintenance costs. For reasons stated, the full 40 acres are to be included in Nev-057863 upon its renewal. If new access is obtained across the UPRR tracks, this parcel can be relinquished from Nev-057863 at anytime during the life of the lease by request/consent of the lessee.

4. Renewing the leases, in some instances, will prevent any type of proposed surface development. The surface owners affected are McLeod and Partners for Profit in Section 16 and BMI in Section 15. (see Figure 3) McLeod's and Partners for Profit having already been disturbed, are essential to the present and future mining operation. BMI's land, while presently untouched, will be at least partially mined before lease N-35779 expires. All three land owners objected to renewal of the leases but did not submit specific development plans. They also contended the lands would be rendered useless for development once mining has ceased. It is true no development can take place while the mine is active, but upon cessation of operations and with proper reclamation by the lessee, development will be able to proceed.

   The remaining lands in the existing leases, owned by PEPCON, Bonanza, Sullivan and the Traurig Foundation, do not involve conflicting interests. PEPCON is in favor of the gravel operation and does not object to aggregate mining within the presently leased area. Sullivan, by means of a private agreement, is allowing Bonanza to mine on his property for a period of ten years. The City of Henderson is presently negotiating with the Traurig Foundation to purchase their property. If the purchase is executed, the City will want the land excavated and leveled to the elevation of the mine floor and hence have no objection to the sand and gravel operation under the circumstances.

5. Continuation of the mining operations will alter and lower the original surface leaving a large depression after mining has ceased. The mining depth will be variable because of the hilly topography but will be no more than about 20 feet at the dry wash elevations. Many surface owners view this lowering of the surface as being detrimental to future development. Some contend the land will be totally useless after mining has ceased.

   Any type of development will require a certain amount of cut and fill activity as the area in question is by no means flat. The City of Henderson, for instance, is already thinking about lowering and leveling

the SE¼NE¼ of Section 16, if purchased from the Traurig Foundation, to accommodate their proposed baseball park. With proper reclamation, the mined land can be made suitable for some type of development. Stipulations, to limit mining depth and configuration of the pit floor, could be made conditions of the leases to insure adequate reclamation is completed. Limiting mining depth would prevent the creation of an unclaimable hole in the ground. Regulating the shape of the pit floor would guarantee the area is left relatively flat with adequate drainage so as to prevent ponding or flooding. The lease stipulations and mining plan should be reviewed to assure these conditions are present before renewal is authorized.

6. Existing leases are located within the Colorado River Basin with surface runoff entering the Colorado River via the Las Vegas Wash and Lake Mead. Examination of the Las Vegas Valley Order 2 soil survey indicates that the site is located on non-saline soils according to salinity classifications established by the Bureau. Thus, no significant increase in salt contribution to the Colorado River is anticipated from the mining activity.

7. No significant adverse economic impact can be identified. The status quo will be maintained, while the modified lease provides some relief for the concerns of landowners. Bonanza Minerals and its subsidiary companies will be allowed to continue their present operation providing direct payroll and employment benefits estimated at $4.5 million to 142 persons. The regional economy will sustain continued employment for an estimated total of 318 persons with personal income estimated at $10.4 million.

   Accommodations have been negotiated with a number of the surface owners within the existing leases, providing some mitigation of the perceived potential for adverse effects, and effecting acceptable compromise. While some remaining real estate values and development opportunities may be adversely affected, such potential is speculative and indeterminate at this time. Present land values and development potential already reflect the existence of sand and gravel mining, and are unlikely to be diminished by continued operations. Opportunities forgone cannot be realistically quantified.

   A relevant and important consideration to be taken into account involves the pending construction of Interstate 515 between Lake Mead Drive and Russell Road. The Nevada Department of Transportation (NDOT) estimates that this project will require about 2.8 million cubic yards of fill material. While a portion of the material required for this construction may be taken from the NDOT free-use site in section 9, the majority will be supplied from other sources. Bonanza Materials has a contract with NDOT to supply 1.5 million cubic yards of material for the project (Nelson, 1987). Renewal of existing leases will ensure their ability to meet contract requirements.

Alternative A: Renew leases for one more five year period, deny lease applications.

Under this alternative, Nev-057863 and N-35779 would be renewed for one more 5 year term with no changes in their present boundaries or size. The expiration date of N-35779 would be adjusted so both leases expire at the same time, February 28, 1992. Specific consequences of this alternative are as follows:

1. Renewing the leases for one more term will prolong and preclude surface development for the next 5 years but at the same time would provide 6 surface owners, who are opposed to leasing, with an end in sight for the mining operation. It also affords them a definite timetable during which development plans can be formulated and a date when implementation can take place. Once the leases expire, the lands will no longer be encumbered by the leasable sand/gravel reservation.

2. A one term renewal puts Bonanza Materials on official notice that mining will not be permitted after lease expiration. It gives them adequate time to prepare for the cessation of operations, complete final reclamation and locate a new mining site if so desired.

   If Bonanza finds another mine site, there is a distinct possibility this material could be hauled to their processing facilities located in the S½SE¼ of Section 9. Bonanza owns most of the surface in this parcel (see Figure 3) and the tenure of their facilities is not dependent on the renewal of lease Nev-057863. Even though the leases and mining would end after 5 years, the rock plant and other facilities could remain in operation indefinitely.

3. Renewing the leases for another 5 years will create the same impacts to the area as described in the Preferred Alternative under point 5. However, point 5 envisions a complete excavation of the area whereas under this alternative, the leased area may not be totally mined out due to the 5 year time frame and final termination of the leases. The end result may be a terrain which is not entirely flat but with ridges/hills and depressions remaining. Although reasonable reclamation will be completed, the area might not be left in a condition suitable for housing or other type development. Additional dirt work may be necessary on the part of the surface owner to meet these needs.

4. No significant adverse economic impacts can be identified. The status quo will be maintained. However, lack of lease modification proposals suggests a greater restraining influence on appreciation of land values and development potential for surface owners.

5. No significant increase in salt contribution to the Colorado River is anticipated if the existing leases are renewed for one more five year period.

6. As with point 1 under the Preferred Alternative, rejecting the three lease applications would prevent the proliferation of mining in the area, curtail additional surface disturbance and permit the surface owners to proceed with their development plans in Section 9 and 10.

Alternative B: Renew lease indefinitely, approve lease applications.

Under the alternative, the existing leases would be renewed in five year periods with no change in lease size. The lease applications would be authorized but boundaries would exclude those lands already having surface improvements on them (NW¼ of Sec. 9 and E½NE¼NW¼ of Sec. 10). Mining and leases would continue until reserves were exhausted. Specific consequences resulting from the alternative are as follows:

1. The existing conflict will be intensified and non-mineral development will be curtailed over a much larger area. Strong opposition to expansion of the existing mining operation and its seemingly perpetual existence can be expected. Of the 20 surface owners involved, only three find favor with the existing mining operation. None, except Bonanza Materials, are in favor of authorizing the lease applications and subsequent expansion.

2. A depression, larger than envisioned under the Preferred Alternative, will be the end result of the mining operation if the leases are renewed and the applications are authorized. However, it is believed the land can be left suitable for non-mineral development once mining has ceased provided proper mining and reclamation procedures are followed. This concept is discussed in some detail under point 5 of the Preferred Alternative. By limiting mining depth, controlling the shape of the pit floor and sloping highwalls, the surface can be left in a reasonable condition for non-mineral development. These mitigative measures can be made as conditions of the leases to assure they are accomplished.

3. Authorizing the lease applications will increase the availability of aggregate reserves in the area, prolong the life of the existing mining operation, and in all probability, involve another aggregate producer, WMK Transit Mix, in the surface/mining use conflict. WMK has a gravel operation in the S½ of Section 3 which is directly north and adjacent to Section 10. Both Bonanza Materials and WMK have applied for leasing rights to Section 10 but since WMK's filing pre-dates Bonanza's, WMK's application would probably prevail.

4. No significant adverse economic impacts on the existing situation, in the short-term, can be identified. However long-term potential for expansion of sand and gravel operations would impose speculative risk over a much larger surface area, involve more surface owners, exacerbate their concern, and intensify the possibility of negative influences on land values and development opportunities. Potential adverse economic effects are speculative, represent opportunities foregone, and can not be estimated at this time.

5. Implementation of this alternative would assure a rapidly growing area of Las Vegas a source of relatively cheap construction aggregate for a long period of time and keep two major aggregate producers in business. It would also benefit the Las Vegas area as a whole since both private and Federal aggregate reserves in the Valley area are being depleted or are unavailable for various reasons. Private reserves are simply being mined out. It is perceived that the acquisition of new reserves on private

land, in proximity to the market, is difficult because of high land values, zoning restrictions and the rapid suburban expansion Las Vegas is experiencing. Las Vegas is consuming its aggregate resources by building on top of them. Reserves on Federal land are generally unavailable because of the private/Federal checkerboard ownership land pattern and opposition by the private sector to aggregate mining in general because of perceived noise, dust, lowering of property values and visual intrusion. For reasons stated, surface owners do not want a gravel operation adjacent to or near their property, particularly if surface improvements are present.

While benefitting Bonanza, WMK and the sand & gravel industry as a whole, this alternative will not be viewed as such by the involved surface owners. Additionally, surface developments will be curtailed over a much larger area than in the Proposed Action or Alternative A. In particular, plans for the construction of the Gibson Industrial Park will be encumbered in Section 10. This project is being diligently pursued by the City of Henderson, Clark County and the property owners in Section 10. To authorize the lease applications with the possibility of bringing yet another aggregate operator into the picture, would most certainly intensify an already volatile situation.

6. As discussed under point 6 of the Preferred Alternative, salt contribution to the Colorado River Basin resulting from the mining operation or proposed lease expansion is negligible. Continuous mining in the area will have no significant impact on the salinity of the Colorado River.

<u>Alternative C: Renew leases until Bonanza Materials is moved to an alternative site, deny lease application.</u>

This alternative would close down the mining operation on lease N-35779 but not necessarily the processing facilities on Nev-057863. The latter lease could be eliminated but since Bonanza owns the bulk of the surface, the rock plant could remain at their choosing. The alternate site, located in T.23S., R.62E., Sections 5, 6, 7 and 8 (Figure 5), was chosen on the basis of material quality, proximity to the existing rock plant, proximity to market if Bonanza chooses to relocate their facilities, the absence of apparent encroaching development and perhaps most importantly, the surface and mineral estates are owned by the Federal government. Ideally, as soon as the area was cleared administratively and awarded to Bonanza Materials, mining would cease on N-35779 and begin on the alternate site regardless of lease exploration date. Specific consequences resulting from this alternative are:

1. While this alternative seemed to be the best route to eliminate the conflict, a few shortcomings were identified later on which diminished its appeal. First of all, the Bureau could not guarantee Bonanza would get the alternate site because of regulatory constraints. Disposal would occur under authority of the Material Sales Act of 1947 (30 U.S.C. 601). Complimentary regulations in 43 CFR 3610.2-1 limit individual noncompetitive sales to 100,000 cubic yds (150,000 tons where 1 cubic yard = 1.5 tons) or less and multiple noncompetitive sales in any one State for the benefit of any one individual, partnership or corporation

during any 12 consecutive calendar month period to 200,000 cubic yards (300,000 tons) or less. Bonanza's 1986 production exceeded 1 million tons and it will probably repeat again in 1987 and in years thereafter. There is no reason to believe production will be less than 300,000 tons. Hence, any contract sale to Bonanza Materials will have to be by competitive bid with no guarantee of success. Due to the growing shortage of aggregate in the Las Vegas area, as discussed under Alternative B, competition from other aggregate producers is anticipated.

2. As identified earlier, water is necessary to the mining operation for processing concrete aggregate and dust control. Since no known water exists on the alternate site, either natural or domestic, a water source would have to be developed, if for nothing else, for dust control. Drilling a well is envisioned as the quickest and most practical means to obtain water although it is not without drawbacks. Obtaining water rights from the State Division of Water Resources, drilling costs, depth to water and flow are but a few considerations. Tapping into domestic water (City) although not impossible, isn't considered practical or even realistic at this point in time. Easements across private lands, permitting, construction, time frames and costs are but a few of the anticipated obstacles needing evaluation and resolution.

3. Access, although not unobtainable, is by no means guaranteed. Roads, currently leading to the alternate site across private lands, are neither city or county roads. As shown on Figure 5, two of the roads are associated with rights-of-way Nev-053768 and N-2557. BLM has no surface management rights where the rights-of-way cross private lands. The successful gravel operator would have to negotiate with the R/W grantee and surface owner for use of the road. Eastern Ave., on the other hand, is dedicated for about 2200 feet from its southern intersection with Lake Mead Drive to the north boundary of Section 36, T.22S. R.61E. From thereon to the alternate site access would be by permission of the surface owner(s). Eastern Avenue is by far the best route to the alternate site. Access could be achieved across public lands to the west and south but would add several miles on to the haul distance and require construction of a new road. Due to the uncertainties stemming from the competitive bidding and tenure of contract (10 year term with no guarantee of renewal), the construction of such a road is thought too costly and impractical under the circumstances.

4. Impacts to the alternate site will be nearly identical to those occurring on the active mining area but will not conflict with surface owner development plans, the surface owner being the Federal government. Open pit mining is expected to first start in the active wash area at the north end boundary of Section 6, T.23S., R.62E. and proceed southward following the wash into Section 7. Mining, at some point in time, may expand into the W½ of Sections 5 and 8. It is unlikely the E½ of Sections 5 and 6 will ever be mined because of the rough terrain and bedrock exposures of the McCullough Range. The first materials contract would probably contain no more than the E½ of Section 6 and the NE¼ of Section 7, T.23S., R.62E.

Implementation of this alternative will end the surface/mining use conflict now occurring in Sections 9 and 16, T.22S., R.62E. but will not force Bonanza Materials out of business. Bonanza's mining operation, but not necessarily its processing facilities, will be relocated to the alternate site. Even though there is no development within one mile of the proposed mining operation, some opposition is to be expected from adjacent land owners. Property value reduction is perceived as the primary objection at this time. Noise, dust, visual pollution and truck traffic are additional facets of mining which could become major criticisms as the area eventually builds up. Some of these impacts may be mitigated by contract stipulation.

5. No significant adverse economic impacts are anticipated until such time as an alternate site can be firmly established. An alternate site might pose potential adverse effects on Bonanza Material's operations, increasing costs and reducing employment and payrolls. This may or may not be significant and would require specific analysis at that time.

   However, complications attendant to the selection of an alternate site, such as access, water and preference rights, suggest that it is unlikely that an acceptable site can be located. This could result in the indefinite renewal of the existing lease until such time as reserves are exhausted, thereby extending the potential for adverse effects, as described in Alternative A, over a longer period of time and consequently increasing their likelihood. Opposition of surface owners would be intensified.

6. As stated, mining will probably commence in the wash at the north end of Section 6, T.23S., R.62E., and proceed southward following the course of the wash. As mining continues, a linear depression, approximating the width of the dry wash, will be created. As mining proceeds eastward, a rectangular depression may result. In theory, all of Sections 6, 7, and the W½ of Sections 5 and 8, T.23S., R.62E., could be mined. Mining depth is unknown, but is not expected to exceed 20 to 25 feet depending on local topography. All vegetation and wildlife habitat within the mining operation area will be adversely impacted. This area, however, has not been identified as critical or crucial habitat for any type species nor is it known to contain any threatened or endangered plants or animals. Salinity contribution to the Colorado River as a result of the proposed mine, cannot be determined due to the lack of soil survey data.

   The main purpose of this alternative is to relocate Bonanza's existing mining operation to a new site which will allow proposed development to proceed on the now leased lands. Since the existing mine is to phased out, it follows that the lease applications should also be rejected in their entirety. Doing so will eliminate leasable sand and gravel in the area thereby allowing surface development to take place in an orderly manner and end the surface/mining use conflict.

Alternative D: Partial renewal of Nev-057863, let both leases expire in 1988, deny lease applications.

Under this alternative, Nev-057863 would be renewed to coincide with the expiration date of N-35779 (September 30, 1988). Nev-057863 is needed for access across the UPRR tracks to the other lease. Without Nev-057863, N-35779 cannot be mined unless new access is built across the UPRR tracks, a proposition which is thought too costly and impracticable because of the short time frame involved. Specific consequences resulting from this alternative are:

1. Renewing Nev-057863 to coincide with the expiration of N-35779 will insure proper reclamation is performed. Rehabilitation may be hindered or not accomplished at all if legal and practicable access is not maintained.

2. As under Alternative A, point 3, total excavation of the lease area will not be complete. A hummocky terrain (series of knolls and depressions) is envisioned after proper reclamation is accomplished, a condition which may not favor commercial or residential development. Additional cut and fill may be required on the part of the surface owners to accommodate their development plans once the leases have expired.

3. Implementation of this alternative would result in the complete closing down of Bonanza Materials and the operations of its three subsidiary companies or their relocation elsewhere. Direct effects would occur to employment and payrolls with indirect effects on the regional economy. A total cessation of these four companies would create an immediate disruption in personal income and employment as described under the "Affected Environment" section of this report. For some employees this loss of employment and income would represent only a temporary dislocation until other sand and gravel producers expanded their operations to fill the void. The length of time required for this adjustment would vary for each individual fortunate enough to find comparable employment. Some employees may be compelled to take jobs offering a lower income in other fields; others may suffer an extended period of unemployment.

   The disappearance of a major producer with a significant materials source from the market, however, is likely to have effects upon both demand and supply. Bonanza Materials represents a major competitive influence upon the bidding process for contracts. With a reduced supply capability, undiminished demand will create upward pressure on prices for new materials resulting in somewhat higher costs for all forms of construction throughout the area until such time as other producers enter the market or expand production or until demand slackens to a level appropriate to the existing resource production possibility. While no estimate of potential economic benefits to the surface owners can be determined, their perception of an adverse economic influence would be removed.

4. Curtailment of Bonanza's mining operation will serve to further reduce the Las Vegas Valley's available reserve of aggregate resources, particularly in the southeast portion of the Valley. Bonanza, as well as other producers, will be forced into seeking aggregate from more distant sources. Aggregate producers already in short supply are Las Vegas Building Materials, Southern Nevada Paving, Nevada Rock and Sand, and WMK Transit Mix. Some are now supplementing their depleting reserves by purchasing material from Bonanza Materials. In the long term, the increased distance and cost to obtain aggregate will be passed on to the consumer.

5. Rejecting the lease applications is necessary for conformance and continuity with lease expiration. With the threat of mining eliminated, surface development will be able to proceed in the lease application area and the surface/mining use conflict will be put to rest.

6. No significant increase in salt contribution to the Colorado River is anticipated if partial renewal of existing leases occur.

Alternative E: Let both leases expire according to Clark County MFP, deny leases applications (No Action Alternate).

Under this alternative, no action would be taken except to follow the decisions as found in the Clark County MFP. Lease Nev-057863, having already expired but extended because of this plan amendment, would expire upon a final amendment decision. Lease N-35779 would terminate on September 30, 1988. Both leases would not be renewed.

If implemented this alternative would effectively nullify N-35779 even though it does not expire for one more year, because Nev-057863 is needed for practical access. Extreme hardships may be imposed on Bonanza Materials as a result of this action specifically in terms of financial loss and insufficient time to relocate and/or shut down operations. Other access could be gained to N-35779 using perhaps St. Rt. 146 but is not thought feasible because of the short time frame, capital investment, road construction and possible permitting to gain access to county/city roads.

Other impacts will be the same as discussed under Environmental Consequences, Alternative D, points 1-6.

COORDINATION, CONSISTENCY, AND PUBLIC PARTICIPATION

All individuals that were originally invited to participate in the Clark County Management Framework Plan completed in January of 1984 were again invited to participate in this plan amendment. In addition to the original mailing list, over 160 other individuals and companies were also notified of the plan amendment. These individuals and companies were felt to have interest which may be affected by the implementation of one or more of the alternatives analyzed in the amendment.

During this notification, a letter dated October 30, 1986, asked participants to comment on planning issues and criteria and to provide feedback as to the range of alternatives to be analyzed. As a result of the scoping, two additional alternatives were developed and analyzed in this amendment. A news release was sent to all newspapers servicing Clark County concurrently with the mail out.

Over 141 letters were received as a result of this 30-day scoping period. Of these, sixteen participants asked to be put on the mailing lists for any other documents associated with this amendment. Those individuals, organizations, agencies and/or companies have been sent this draft plan amendment for their review.

Following this 30-day review period for the draft plan amendment it will be sent to the Nevada Governor for his consistency review through the Nevada State Clearinghouse.

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